

ORIGINAL

BEFORE THE
Federal Communications Commission
 WASHINGTON, DC 20554

AUG 22 1997

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)

Advanced Television Systems)
 and Their Impact Upon the Existing)
 Television Broadcast Service)

MM Docket No. 87-268

Directed to: The Commission

SUPPLEMENT TO PETITION FOR RECONSIDERATION

Quincy Newspapers, Inc. ("QNI"), pursuant to the Commission's *Order* released July 2, 1997 (DA 97-1377) hereby respectfully submits its Supplement to its Petition for Reconsideration with respect to the Commission's *Fifth and Sixth Reports and Orders* in the above-captioned proceeding. This Supplement addresses issues pertaining to stations WSJV(TV), Elkhart, Indiana, and WVVA(TV), Bluefield, West Virginia only.

As noted in QNI's Petition, WSJV(TV) was assigned DTV channel 58, which is outside the DTV channel core. QNI also noted that WSJV's NTSC signal will suffer 10% new DTV interference under the Commission's current allotment table. Relatively few other stations in the table suffer as much DTV-NTSC interference. Accordingly, pending the Commission's release of OET Bulletin No. 69, QNI suggested that DTV channel 25 might be a feasible alternative for WSJV.

In addition, QNI pointed out that station WVVA was issued DTV channel 46; its NTSC allotment is channel 6. If the Commission does not expand the "core" to include VHF channels 2-6, WVVA (unlike its competitors) will not have the option

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of returning to its NTSC channel, which has substantial brand name recognition in the market. Also, the area in and around Bluefield, West Virginia is mostly mountainous terrain. Propagation of DTV or NTSC signals in the UHF band in mountainous terrain presents several potential problems. As a result, WVVA's DTV allotment replicates only 94.2% of the station's analog coverage. Accordingly, QNI requested that the Commission allot DTV channel 23 to WVVA.

QNI is now supplementing its Petition for Reconsideration to include the attached engineering study prepared by Lohnes & Culver, P.E., which incorporates the software package described in OET Bulletin No. 69 and confirms that the Commission may allot DTV channel 25 to WSJV and DTV channel 23 to WVVA without producing any material effect on signal coverage or interference to other stations. Accordingly, QNI once again requests modification of the DTV allotments for WSJV and WVVA in accordance with its Petition for Reconsideration and the Lohnes & Culver statement submitted herewith.

Respectfully submitted,

QUINCY NEWSPAPERS, INC.



By: Ralph M. Oakley
Vice President - Broadcast Operations

August 22, 1997

**EXHIBIT E
ENGINEERING STATEMENT
SUPPLYING SUPPLEMENTAL INFORMATION
IN SUPPORT OF A PETITION FOR RECONSIDERATION
OF THE SIXTH REPORT AND ORDER IN DOCKET 87-268
BY QUINCY NEWSPAPERS, INC.**

Prepared by
Lohnes and Culver Washington, D.C.
August, 1997

**EXHIBIT E
ENGINEERING STATEMENT
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BY QUINCY NEWSPAPERS, INC.**

INTRODUCTION

This statement was prepared on behalf of Quincy Newspapers, Inc. ("QNI"), licensee of television broadcast stations WVVA Channel 6 in Bluefield, West Virginia and WSJV Channel 28 in Elkhart, Indiana. QNI filed a Petition For Reconsideration of the Sixth Report and Order in Docket 87-268 requesting reconsideration of the DTV channel assignments for WVVA and WSJV in the DTV Table of Allotments. The petition did not include any technical information supporting QNI's request since the technical methodology used by the Commission for evaluating DTV/NTSC coverage and interference was not available at the time the petition was filed. Because technical information relating to QNI's petition is now available in OET Bulletin No. 69, adopted July 2, 1997 by Commission Order (DA No. 97-1377), this statement supplies supplemental information pertaining to QNI's request for reconsideration of the DTV allotments for WVVA and WSJV.

TECHNICAL ANALYSIS

QNI petitioned for reconsideration of the Sixth Report and Order by requesting a change in the DTV Table of Allotments with respect to the pairing of DTV Channel 46 with the licensed NTSC facility of WVVA Channel 6 at Bluefield, WV and the pairing of DTV Channel 58 with the licensed NTSC facility of WSJV Channel 28 at Elkhart, IN. In the petition QNI proposed DTV Channel 23 as an alternative allotment for DTV Channel 46 at Bluefield, WV and DTV Channel 25 as an alternative for DTV Channel 58 at Elkhart. QNI emphasized that it was unable to supply complete technical information in support of the proposed allotments since the technical parameters used by the

Commission in developing the DTV allotment plan had not been released to the public. The software program needed to verify the viability of QNI's proposal to change the DTV channel assignments of WVVA and WSJV is now available through the release of OET Bulletin No. 69. The office of the undersigned has the complete software package as described in OET Bulletin No. 69 available for use on a computer work station similar to the computers used by OET in the development of the DTV allotment plan. The results of individual market analysis have been compared with service replication and interference evaluations contained in Table 1 of Appendix B of the Sixth Report and Order with total verification of the accuracy of the program.

Analysis for WVVA

On behalf of QNI the Office of Lohnes and Culver has conducted an analysis using the software developed by OET to demonstrate that DTV Channel 23 can be paired with NTSC Channel 6 at Bluefield, WV as an alternative to the the DTV Channel 46 allotment. Attached to this statement as Figure 1 is a computer printout showing an analysis of the allotment of DTV Channel 46 at Bluefield proposed by the Commission in the Sixth Report, as compared with an analysis of the alternative allotment of DTV Channel 23 proposed by QNI. The analysis indicates that the percent match for replication of the licensed NTSC Channel 6 operation of WVVA for the proposed allotment of DTV Channel 23 is essentially the same as the allotment of DTV Channel 46.

A study of other NTSC operations and proposed DTV allotments was conducted to determine the impact on those operations/allotments as a result of the proposed change in the Bluefield allotment. The results of that analysis are tabulated on Figure 1A. The analysis indicates that the proposed DTV Channel 23 allotment will have a minimal effect on the percent match for ATV/NTSC replication with respect to all affected DTV allotments and will not cause additional interference to NTSC operations, with the exception of a minor increase in interference to Channel 22 at Pikeville, KY.

This increase in interference is not significant since it represents less than 0.5% of the total area and population within the noise limited contour of Channel 22 that is not affected by terrain losses.

Analysis for WSJV

An analysis was also conducted using the software developed by OET to demonstrate that DTV Channel 25 can be paired with NTSC Channel 28 at Elkhart, IN as an alternative to the DTV Channel 58. Attached to this statement as Figure 2 is a computer printout showing an analysis of the allotment of DTV Channel 58 at Elkhart proposed by the Commission in the Sixth Report, as compared with an analysis of the alternative allotment of DTV Channel 25 proposed by QNI. The analysis indicates that the percent match for replication of the licensed NTSC Channel 28 operation of WSJV for the proposed allotment of DTV Channel 25 is slightly less than the allotment of DTV Channel 58 by 3.3% in area and 2.1% in population.

The percent match for replication of the licensed NTSC operation of WSJV improves when the proposed DTV Channel 25 allotment is evaluated in a non-directional mode. QNI objects to being limited to a directional envelope pattern for replication of the licensed NTSC operation of WSJV on its paired DTV channel. WSJV operates on NTSC Channel 28 using a directional antenna for the purpose of achieving the licensed maximum effective radiated power of 5,000 kilowatts. Since WSJV does not employ a directional antenna for allocation or multiple ownership reasons, QNI believes that limiting the DTV operation of WSJV to a directional envelope pattern leaves the station without flexibility and places it at a disadvantage with competitors.

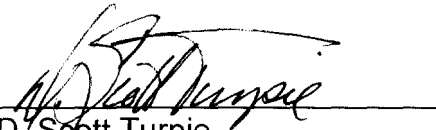
The Commission's DTV allotment plan in the Sixth Report and Order affords protection to the licensed NTSC operation of WSJV based on the station's directional antenna pattern. Although this methodology imposes a limitation on the DTV allotment for WSJV, the envelope pattern derived from the proposed pairing of DTV Channel 25

was considered in evaluating the effect on other NTSC operations and proposed DTV allotments. The results of the analysis shown on Figure 2A indicate that the proposed DTV Channel 25 allotment will not adversely effect the percent match for ATV/NTSC replication of other DTV allotments or significantly increase interference to NTSC operations. In addition, DTV Channel 25 was also found to have a minimal impact on other DTV allotments and NTSC operations when used to replicate WSJV in a non-directional mode.

CONCLUSION

The analysis for WWVA and WSJV described above, based on the use of the Commission's computer software, demonstrates that there are no DTV allotments or NTSC operations that would be adversely affected by changing the DTV channel allotment for WWVA to DTV Channel 23 and the DTV channel allotment for WSJV to DTV Channel 25. QNI's proposal to pair DTV Channel 25 with WSJV is justifiable since the allotment on DTV Channel 58 is not within of the tentative DTV core of channels specified in the Sixth Report and Order. QNI further request that the Commission reconsider its treatment of the paired DTV allotment for WSJV by evaluating service replication based on a non-directional antenna pattern since the impact on other DTV allotments and NTSC operations are believed to be minimal.

Respectfully submitted,
LOHNES AND CULVER



D. Scott Turpie

August, 1997

FIGURE 1
COMPUTER ANALYSIS
OF PAIRING DTV CHANNEL 23 WITH
NTSC CHANNEL 6 AT BLUEFIELD, WEST VIRGINIA

Analysis of: 6N BLUEFIELD, WV

	<u>POPULATION</u>	<u>AREA (sq. km.)</u>
within Noise Limited Contour	999578	31957.1
not affected by terrain losses	739610	26821.3
lost to NTSC IX	49802	2124.6
lost to additional IX by ATV	0	0.0
lost to all IX	49802	2124.6

Analysis of: 46A BLUEFIELD, WV (Sixth Report and Order)

	<u>POPULATION</u>	<u>AREA (sq. km.)</u>
within Noise Limited Contour	999578	31957.1
not affected by terrain losses	698861	24988.2
lost to NTSC IX	5145	327.5
lost to additional IX by ATV	12440	127.8
lost to ATV IX only	12496	135.8
lost to all IX	17585	455.3
percent match ATV/NTSC	94.4	94.2

Analysis of: 23A BLUEFIELD, WV (QNI Petition for Reconsideration)

	<u>POPULATION</u>	<u>AREA (sq. km.)</u>
within Noise Limited Contour	999578	31957.1
not affected by terrain losses	725148	25986.6
lost to NTSC IX	2952	71.9
lost to additional IX by ATV	36306	1565.5
lost to ATV IX only	36993	1601.5
lost to all IX	39258	1637.4
percent match ATV/NTSC	94.8	93.6

Prepared by
Lohnes and Culver Washington, DC
August, 1997

FIGURE 1A
COMPUTER ANALYSIS
OF NTSC OPERATIONS AND DTV ALLOTMENTS
AFFECTED BY PAIRING DTV CHANNEL 23 WITH
NTSC CHANNEL 6 AT BLUEFIELD, WEST VIRGINIA

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Analysis of: 22N PIKEVILLE, KY

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	523129	19505.1	523129	19505.1
not affected by terrain losses	433766	16238.8	433766	16238.8
lost to NTSC IX	3987	282.6	3987	282.6
lost to additional IX by ATV	1082	72.7	3102	149.4
lost to all IX	5069	355.3	7089	432.0

Analysis of: 26N WINSTON-SALEM, NC

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	1771431	27410.3	1771431	27410.3
not affected by terrain losses	1706909	24437.5	1706909	24437.5
lost to NTSC IX	64767	990.9	64767	990.9
lost to additional IX by ATV	1291	95.9	1291	95.9
lost to all IX	66058	1086.8	66058	1086.8

Analysis of: 19N KINGSPORT, TN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	930434	26423.2	930434	26423.2
not affected by terrain losses	712870	18713.6	712870	18713.6
lost to NTSC IX	4604	177.4	4604	177.4
lost to additional IX by ATV	2135	116.9	2135	116.9
lost to all IX	6739	294.4	6739	294.4

Analysis of: 24N DANVILLE, VA

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	308375	5843.9	308375	5843.9
not affected by terrain losses	306349	5743.0	306349	5743.0
lost to NTSC IX	10636	92.8	10636	92.8
lost to additional IX by ATV	9300	330.9	9300	330.9
lost to all IX	19936	423.8	19936	423.8

FIGURE 1A (Cont'd)
COMPUTER ANALYSIS
OF NTSC OPERATION AND DTV ALLOTMENTS
AFFECTED BY PAIRING DTV CHANNEL 23 WITH
NTSC CHANNEL 6 AT BLUEFIELD, WEST VIRGINIA

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Analysis of: 21N LYNCHBURG, VA

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	830606	24701.8	830606	24701.8
not affected by terrain losses	658009	19108.3	658009	19108.3
lost to NTSC IX	30902	686.7	30902	686.7
lost to additional IX by ATV	53038	435.2	53038	435.2
lost to all IX	83940	1121.9	83940	1121.9

Analysis of: 23N RICHMOND, VA

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	1108667	21981.0	1108667	21981.0
not affected by terrain losses	1107690	21920.5	1107690	21920.5
lost to NTSC IX	1712	56.4	1712	56.4
lost to additional IX by ATV	8	4.0	8	8.1
lost to all IX	1720	60.5	1720	64.5

Analysis of: 15N ROANOKE, VA

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	1034562	28620.6	1034562	28620.6
not affected by terrain losses	843260	21413.5	843260	21413.5
lost to NTSC IX	15756	667.2	15756	667.2
lost to additional IX by ATV	9120	287.6	9120	287.6
lost to all IX	24876	954.8	24876	954.8

Analysis of: 27N ROANOKE, VA

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	996339	25641.2	996339	25641.2
not affected by terrain losses	866844	19719.7	866844	19719.7
lost to NTSC IX	50800	1179.5	50800	1179.5
lost to additional IX by ATV	24650	819.7	24650	835.6
lost to all IX	75450	1999.2	75450	2015.2

Analysis of: 38N ROANOKE, VA

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	769185	20170.7	769185	20170.7
not affected by terrain losses	641089	13898.3	641089	13898.3
lost to NTSC IX	700	71.9	700	71.9
lost to additional IX by ATV	12733	547.0	12733	547.0
lost to all IX	13433	618.9	13433	618.9

FIGURE 1A (Cont'd)
COMPUTER ANALYSIS
OF NTSC OPERATION AND DTV ALLOTMENTS
AFFECTED BY PAIRING DTV CHANNEL 23 WITH
NTSC CHANNEL 6 AT BLUEFIELD, WEST VIRGINIA

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Analysis of: 24A PIKEVILLE, KY

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	523129	19505.1	523129	19505.1
not affected by terrain losses	454443	17094.8	454443	17094.8
lost to NTSC IX	0	0.0	0	0.0
lost to additional IX by ATV	0	0.0	0	0.0
lost to ATV IX only	0	0.0	0	0.0
lost to all IX	0	0.0	0	0.0
percent match ATV/NTSC	100.0	100.0	100.0	100.0

Analysis of: 23A CHARLOTTE, NC

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	3405562	50747.4	3405562	50747.4
not affected by terrain losses	3231591	47749.1	3231591	47749.1
lost to NTSC IX	16521	582.9	16521	582.9
lost to additional IX by ATV	0	8.0	8505	195.6
lost to ATV IX only	0	8.0	9374	227.6
lost to all IX	16521	590.9	25026	778.5
percent match ATV/NTSC	99.2	98.9	99.1	98.7

Analysis of: 23A GREENVILLE, NC

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	645612	15450.8	645612	15450.8
not affected by terrain losses	645612	15450.8	645612	15450.8
lost to NTSC IX	939	24.2	939	24.2
lost to additional IX by ATV	0	0.0	0	0.0
lost to ATV IX only	0	0.0	0	0.0
lost to all IX	939	24.2	939	24.2
percent match ATV/NTSC	100.0	100.0	100.0	100.0

Analysis of: 31A WINSTON-SALEM, NC

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	2672581	45321.2	2672581	45321.2
not affected by terrain losses	2348822	41365.9	2348822	41365.9
lost to NTSC IX	26088	1033.7	26088	1033.7
lost to additional IX by ATV	47371	538.8	47371	538.8
lost to ATV IX only	49663	614.7	49663	614.7
lost to all IX	73459	1572.6	73459	1572.6
percent match ATV/NTSC	99.7	99.6	99.7	99.6

FIGURE 1A (Cont'd)
COMPUTER ANALYSIS
OF NTSC OPERATION AND DTV ALLOTMENTS
AFFECTED BY PAIRING DTV CHANNEL 23 WITH
NTSC CHANNEL 6 AT BLUEFIELD, WEST VIRGINIA

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Analysis of: 23A JELICO, TN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	232099	5206.9	232099	5206.9
not affected by terrain losses	226370	4947.5	226370	4947.5
lost to NTSC IX	9926	27.9	9926	27.9
lost to additional IX by ATV	0	8.0	0	8.0
lost to ATV IX only	0	8.0	0	8.0
lost to all IX	9926	35.9	9926	35.9
percent match ATV/NTSC	100.0	100.0	100.0	100.0

Analysis of: 27A KINGSPORT, TN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	930434	26423.2	930434	26423.2
not affected by terrain losses	732987	19548.2	732987	19548.2
lost to NTSC IX	2568	133.1	2568	133.1
lost to additional IX by ATV	2820	108.9	2820	108.9
lost to ATV IX only	2820	112.9	2820	112.9
lost to all IX	5388	241.9	5388	241.9
percent match ATV/NTSC	99.6	99.3	99.6	99.3

Analysis of: 20A LYNCHBURG, VA

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	830606	24701.8	830606	24701.8
not affected by terrain losses	717467	20369.9	717467	20369.9
lost to NTSC IX	76507	1573.1	76507	1573.1
lost to additional IX by ATV	1050	51.9	1050	51.9
lost to ATV IX only	9515	115.8	9515	115.8
lost to all IX	77557	1625.0	77557	1625.0
percent match ATV/NTSC	96.4	96.0	96.4	96.0

Analysis of: 30A ROANOKE, VA

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	1391910	42278.7	1391910	42278.7
not affected by terrain losses	1190915	35377.4	1190915	35377.4
lost to NTSC IX	12102	283.6	12102	283.6
lost to additional IX by ATV	9224	407.4	9887	423.3
lost to ATV IX only	19987	571.1	20650	591.1
lost to all IX	21326	690.9	21989	706.9
percent match ATV/NTSC	99.5	99.2	99.5	99.2

FIGURE 1A (Cont'd)
COMPUTER ANALYSIS
OF NTSC OPERATION AND DTV ALLOTMENTS
AFFECTED BY PAIRING DTV CHANNEL 23 WITH
NTSC CHANNEL 6 AT BLUEFIELD, WEST VIRGINIA

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Analysis of: 23A HUNTINGTON, WV

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 23	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
<i>within Noise Limited Contour</i>	1139156	31816.2	1139156	31816.2
<i>not affected by terrain losses</i>	1079813	30435.9	1079813	30435.9
<i>lost to NTSC IX</i>	6101	124.8	6101	124.8
<i>lost to additional IX by ATV</i>	33	4.0	22091	784.7
<i>lost to ATV IX only</i>	1108	16.1	24355	837.1
<i>lost to all IX</i>	6134	128.8	28192	909.5
<i>percent match ATV/NTSC</i>	99.7	99.6	99.0	98.3

Prepared by
Lohnes and Culver Washington, DC
August, 1997

FIGURE 2A
COMPUTER ANALYSIS
OF PAIRING DTV CHANNEL 25 WITH
NTSC CHANNEL 28 AT ELKHART, INDIANA

Analysis of: 28N ELKHART, IN

	<u>POPULATION</u>	<u>AREA (sq. km.)</u>
within Noise Limited Contour	1334588	21320.1
not affected by terrain losses	1334588	21316.0
lost to NTSC IX	114608	531.9
lost to additional IX by ATV	134361	1837.4
lost to all IX	248969	2369.3

Analysis of: 58A ELKHART, IN (Sixth Report and Order)

	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	1334588	21320.1
not affected by terrain losses	1334588	21316.0
lost to NTSC IX	65	4.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	65	4.0
percent match ATV/NTSC	100.0	100.0

Analysis of: 25A ELKHART, IN (QNI Petition for Reconsideration)

	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	1334588	21320.1
not affected by terrain losses	1334588	21320.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	28291	785.8
lost to ATV IX only	28291	785.8
lost to all IX	28291	785.8
percent match ATV/NTSC	97.9	96.7

Prepared by
Lohnes and Culver Washington, DC
August, 1997

FIGURE 2A
COMPUTER ANALYSIS
OF PAIRING DTV CHANNEL 25 WITH
NTSC CHANNEL 28 AT ELKHART, INDIANA

Analysis of: 28N ELKHART, IN

	<u>POPULATION</u>	<u>AREA (sq. km.)</u>
within Noise Limited Contour	1334588	21320.1
not affected by terrain losses	1334588	21316.0
lost to NTSC IX	114608	531.9
lost to additional IX by ATV	134361	1837.4
lost to all IX	248969	2369.3

Analysis of: 58A ELKHART, IN (Sixth Report and Order)

	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	1334588	21320.1
not affected by terrain losses	1334588	21316.0
lost to NTSC IX	65	4.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	65	4.0
percent match ATV/NTSC	100.0	100.0

Analysis of: 25A ELKHART, IN (QNI Petition for Reconsideration)

	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	1334588	21320.1
not affected by terrain losses	1334588	21320.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	28291	785.8
lost to ATV IX only	28291	785.8
lost to all IX	28291	785.8
percent match ATV/NTSC	97.9	96.7

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FIGURE 2A
COMPUTER ANALYSIS
OF PAIRING DTV CHANNEL 25 WITH
NTSC CHANNEL 28 AT ELKHART, INDIANA

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Analysis of: 26N CHICAGO, IL

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	8238830	23106.3	8238830	23106.3
not affected by terrain losses	8237413	23066.2	8237413	23066.2
lost to NTSC IX	54422	561.9	54422	561.9
lost to additional IX by ATV	33866	465.6	33866	465.6
lost to all IX	88288	1027.5	88288	1027.5

Analysis of: 25N PEORIA, IL

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	573648	15262.8	573648	15262.8
not affected by terrain losses	573528	15234.9	573528	15234.9
lost to NTSC IX	6071	819.1	6071	819.1
lost to additional IX by ATV	340	63.9	340	63.9
lost to all IX	6411	883.0	6411	883.0

Analysis of: 21N FORT WAYNE, IN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	652076	12340.8	652076	12340.8
not affected by terrain losses	652076	12340.8	652076	12340.8
lost to NTSC IX	49001	787.1	49001	787.1
lost to additional IX by ATV	4276	176.7	4276	176.7
lost to all IX	53277	963.8	53277	963.8

Analysis of: 24A FORT WAYNE, IN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	652076	12340.8	652076	12340.8
not affected by terrain losses	652076	12340.8	652076	12340.8
lost to NTSC IX	1440	84.3	1440	84.3
lost to additional IX by ATV	0	0.0	0	0.0
lost to ATV IX only	0	0.0	0	0.0
lost to all IX	1440	84.3	1440	84.3
percent match ATV/NTSC	99.8	99.3	99.8	99.3

FIGURE 2A (Cont'd)
COMPUTER ANALYSIS
OF NTSC OPERATION AND DTV ALLOTMENTS
AFFECTED BY PAIRING DTV CHANNEL 25 WITH
NTSC CHANNEL 28 AT ELKHART, INDIANA

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Analysis of: 33N FORT WAYNE, IN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	636011	12004.8	636011	12004.8
not affected by terrain losses	636011	12004.8	636011	12004.8
lost to NTSC IX	27981	273.1	27981	273.1
lost to additional IX by ATV	641	8.0	641	8.0
lost to all IX	28622	281.1	28622	281.1

Analysis of: 39N FORT WAYNE, IN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	688654	13477.1	688654	13477.1
not affected by terrain losses	688654	13477.1	688654	13477.1
lost to NTSC IX	0	0.0	0	0.0
lost to additional IX by ATV	10424	365.4	10424	365.4
lost to all IX	10424	365.4	10424	365.4

Analysis of: 40A FORT WAYNE, IN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	688654	13477.1	688654	13477.1
not affected by terrain losses	688654	13477.1	688654	13477.1
lost to NTSC IX	10372	273.1	10372	273.1
lost to additional IX by ATV	0	0.0	0	0.0
lost to ATV IX only	0	0.0	0	0.0
lost to all IX	10372	273.1	10372	273.1
percent match ATV/NTSC	98.5	98.0	98.5	98.0

Analysis of: 22N SOUTH BEND, IN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	1421492	24562.6	1421492	24562.6
not affected by terrain losses	1421334	24554.5	1421334	24554.5
lost to NTSC IX	56580	1623.8	56580	1623.8
lost to additional IX by ATV	109515	854.2	109515	854.2
lost to all IX	166095	2478.0	166095	2478.0

FIGURE 2A (Cont'd)
COMPUTER ANALYSIS
OF NTSC OPERATION AND DTV ALLOTMENTS
AFFECTED BY PAIRING DTV CHANNEL 25 WITH
NTSC CHANNEL 28 AT ELKHART, INDIANA

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Analysis of: 25N SAGINAW, MI

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	2740400	27106.7	2740400	27106.7
not affected by terrain losses	2450587	26789.3	2450587	26789.3
lost to NTSC IX	612424	1916.7	612424	1916.7
lost to additional IX by ATV	60	4.0	271	12.1
lost to all IX	612484	1920.7	612695	1928.7

Analysis of: 17A GARY, IN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	4408417	15233.8	4408417	15233.8
not affected by terrain losses	4408417	15233.8	4408417	15233.8
lost to NTSC IX	41079	12.0	41079	12.0
lost to additional IX by ATV	0	0.0	0	0.0
lost to ATV IX only	0	0.0	0	0.0
lost to all IX	41079	12.0	41079	12.0
percent match ATV/NTSC	99.1	99.9	99.1	99.9

Analysis of: 25A INDIANAPOLIS, IN

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	2426786	33434.5	2426786	33434.5
not affected by terrain losses	2399648	32931.2	2399648	32931.2
lost to NTSC IX	1400	71.9	1400	71.9
lost to additional IX by ATV	4431	259.6	55021	1242.2
lost to ATV IX only	4676	279.6	55266	1266.1
lost to all IX	5831	331.5	56421	1314.1
percent match ATV/NTSC	100.0	99.9	99.8	99.2

Analysis of: 25A MILWAUKEE, WI

	SIXTH REPORT & ORDER		PROPOSED DTV CHANNEL 25	
	<u>POPULATION</u>	<u>AREA (sq. km)</u>	<u>POPULATION</u>	<u>AREA (sq. km)</u>
within Noise Limited Contour	2101622	17237.4	2101622	17237.4
not affected by terrain losses	2101355	17217.2	2101355	17217.2
lost to NTSC IX	0	0.0	0	0.0
lost to additional IX by ATV	0	0.0	0	0.0
lost to ATV IX only	0	0.0	0	0.0
lost to all IX	0	0.0	0	0.0
percent match ATV/NTSC	100.0	100.0	100.0	100.0

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